Workshop on...

High Performance Computing in Particle Accelerator Science and Technology

http://scidac.nersc.gov/accelerator/hpcpast/

to be held in conjunction with the

ICCS 2002
International Conference on Computational Science
April 21 - 24, 2002
Amsterdam, The Netherlands

http://www.science.uva.nl/events/ICCS2002/

Large-scale computations are playing an increasingly important role in the theory, design and development of particle accelerators. Examples include electromagnetic field calculations, simulation of space-charge dominated beams and halo formation, beam-beam simulations, simulation of instabilities, long-term tracking for predicting dynamic aperture, real-time modeling of accelerators, and the simulation of laser- and plasma-based accelerator concepts. For these topics, speakers will describe the physical models, numerical algorithms, and their implementation on high performance computing (HPC) platforms. Topics will also include the development of parallel frameworks for building HPC accelerator codes, and visualization techniques for large-scale data analysis and discovery.

A limited number of contributed, 20 or 30 minute talks will be selected for this session. Full papers will be published in the proceedings of ICCS 2002.

Suggestions for speakers, and abstracts, should be sent to Kymba A'Hearn, KSAHearn@lbl.gov.

Important Dates:

December 1, 2001	**-**	**Abstract submission**
December 5, 2001	**-**	**Notification of acceptance**
January 15, 2002	**-**	**Submission of camera Ready Papers**
April 21-24, 2002	**-**	**ICCS 2002 conference**

Workshop Organizers:

Andreas Adelmann, Paul Scherrer Institut, Switzerland
Robert Ryne, Lawrence Berkeley National Laboratory, USA

Questions regarding the workshop should be sent to the workshop coordinator, Kymba A'Hearn, KSAHearn@lbl.gov, 510-486-8671.